

REMARKS

This paper is responsive to the final Office Action dated March 20, 2009. Claims 1 - 8 are in the application and stand rejected for the reasons given in the Office Action.

Applicants again traverse the provisional rejection of claims 1 – 8 under judicial doctrine as being unpatentable over claims 1 – 5 of copending application 10/573,723. The presently claimed process requires that mesotrione having reduced cyanide levels be formed. This is not obvious over claims 1 – 5 of the '723 application, which pertains to the formation of a mesotrione enolate, whether taken alone or in view of Wichert et al. A terminal disclaimer will be taken under advisement once allowable subject matter has been identified in claims 1 – 8 herein.

Applicants again respectfully traverse the rejection of claims 1 – 8 under § 103(a) as being unpatentable over Javdani et al (US 7285678) or Ueda et al. (US 4,937,386).

As discussed previously, the Examiner suggests that Javdani teaches a process for the preparation of mesotrione and reduction of undesirable impurities in a mesotrione sample. While this may be true - it is important for the Examiner to appreciate that the method taught by Javdani actually involves the purification of NMSBA - a precursor of mesotrione. Only then is the purified NMSBA so produced reacted with 1,3-cyclohexanedione in the presence of a cyanide catalyst to form mesotrione (see column 1, lines 58-60). Thus it can be seen that the cyanide impurities are introduced into the method taught by Javdani after the purification steps employed in that method. Accordingly, the method of Javdani does not solve the problem of cyanide impurities in the final mesotrione sample. Furthermore, Javdani does not teach any purification steps with regard to the mesotrione sample so produced. Javdani merely adopts the art recognised procedure wherein the Mesotrione is precipitated from the reaction mixture through a series of pH adjustment steps and isolated by filtration or centrifugation (column 1, lines 60 – 64). Accordingly, one of ordinary skill will appreciate that the mesotrione sample so produced comprises cyanide impurities – which the method of the present invention solves.

Regarding Ueda, the reference teaches a method (Example 1) for producing 4,4,5-Trimethyl-2-(2-nitro-4-methylsulfonylbenzoyl)cyclohexane-1,3-dione. In a manner analogous to Javdani, Ueda teaches reaction of NMSBA and 4,4,5-trimethyl-cyclohexane-1,3-dione to provide the

final product – in the presence of a potassium cyanide catalyst (column 3, line 41). Ueda then teaches the crystallisation of the final product via decreasing the pH.

It can therefore be seen that Ueda does not teach a method analogous to the method of the present invention – wherein the final product produced is converted to the enolate via increasing the pH to greater than 9.5 and then crystallising the product for the solution.

Thus, contrary to the Examiner's assertions, it can be seen further that neither Javdani nor Ueda are suggestive of the method of the present invention.

Thus, even if one of ordinary skill were to combine the prior art teachings in the manner suggested by the Examiner, such combination would not result in the presently claimed invention. Accordingly, it is submitted that the claims are not obvious in view of the prior art references cited by the Examiner. Reconsideration and withdrawal of the § 103 rejection of claims 1 – 8 are again respectfully requested.

In view of the foregoing remarks, Applicants submit that the subject matter of the claims is patentable and that such claims are in condition for allowance. Reconsideration and withdrawal of all rejections are respectfully requested, along with the issuance of a Notice of Allowance.

Respectfully submitted,

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